## **Comparisons of Job Characteristics**

Focus Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015) Associated Occupation: Boilermakers (47-2011)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

### Knowledge

Similarity of Focus Occupation to Associated Occupation: 87

Focus Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)

Associated Occupation: Boilermakers (47-2011)

Associated Occupation's Key Knowledge Elements

Average Rating, All Occupation's Rating

Associated Occupation's Rating

Associated Occupation's Rating

Key Knowledge Elements	Occupations	Rating	Rating	Evaluation of 1 code cocapation	
Mechanical	6.8	17.5	12.8	Extensive education and/or be required	training may
Building and Construction	4.0	13.8	14.3	Current knowledge level ma	y be sufficient
Engineering and Technology	5.7	12.6	7.2	Extensive education and/or be required	training may
Design	5.2	11.9	8.0	Extensive education and/or be required	training may
Physics	4.3	7.6	5.7	Extensive education and/or be required	training may

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation: 5

Focus Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015) Associated Occupation: Boilermakers (47-2011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Operation and Control	5.4	11.4	5.0	<<	Extensive development of skills in this area may be required	
Operation Monitoring	6.6	11.1	4.2	<<	Extensive development of skills in this area may be required	
Quality Control Analysis	5.9	10.6	5.6	<<	Extensive development of skills in this area may be required	
Troubleshooting	4.5	9.6	5.1	<<	Extensive development of skills in this area may be required	
Equipment Maintenance	3.5	9.3	4.7	<<	Extensive development of skills in this area may be required	

Repairing	3.4	9.2	7.7	A higher skill level may be required
Equipment Selection	3.3	8.0	5.2	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of  $O^*NET$  (Occupation Information Network) data.

## **Abilities**

#### Similarity of Focus Occupation to Associated Occupation: 79

Focus Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015) Associated Occupation: Boilermakers (47-2011)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	11.8	8.5	<<	Extensive improvement in abilities may be required	
Control Precision	6.6	11.5	8.1	<<	Extensive improvement in abilities may be required	
Manual Dexterity	6.5	10.4	9.6	0	Current ability level may be sufficient	
Multilimb Coordination	6.0	10.3	7.5	<<	Extensive improvement in abilities may be required	
Reaction Time	4.8	8.9	5.3	<<	Extensive improvement in abilities may be required	
Extent Flexibility	4.8	8.7	11.0	>	Current ability level is likely sufficient	
Response Orientation	4.0	7.7	2.8	<<	Extensive improvement in abilities may be required	
Gross Body Equilibrium	3.2	6.6	6.1	0	Current ability level may be sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of  $O^*NET$  (Occupation Information Network) data.

# **Activities that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 92

Focus Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015) Associated Occupation: Boilermakers (47-2011)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Apply cleaning solvents	41
Assemble and install pipe sections, fittings, or plumbing fixtures	71
Build or repair structures in construction, repair, or manufacturing setting	54
Cut, bend, or thread pipe for gas, air, hydraulic, or water lines	84
Fabricate, assemble, or disassemble manufactured products by hand	11
Measure and mark reference points or cutting lines on workpieces	66
Move or fit heavy objects	8
Repair or replace gas, steam, sewer, or water piping or fixtures	82
Use acetylene welding/cutting torch	54
Use basic plumbing techniques	72

Use hand or power tools	2
Use pipe fitting equipment	80

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 83

Focus Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015) Associated Occupation: Boilermakers (47-2011)

Tools and Technologies	Exclusivity
Aerial lifts	13
Compressors	9
Cutting and crimping and punching tools	3
Dispensing tools	6
Face and head protection	7
Fall protection	16
Forming tools	2
Gas analyzers and monitors	10
Holding and clamping tools	3
Indicating and recording instruments	2
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Marking tools	11
Measuring and layout tools	3
Metal bending and forming machinery	17
Non destructive examination equipment	13
Personal communication devices	2
Pneumatic tools	8
Power tools	2
Pressure measuring and control instruments	10
Prying and bending tools	10
Rough and finishing tools	5
Sampling equipment	12
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.